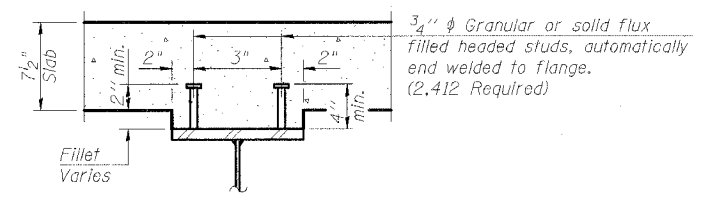


**BILL OF MATERIAL**

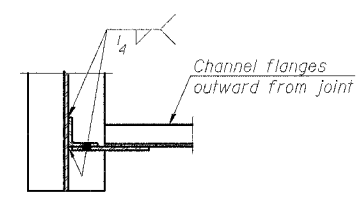
Item	Unit	Quantity
Furnishing and Erecting Structural Steel	L. Sum	1
Stud Shear Connectors	Each	2,412

**TYPICAL BEAM ELEVATION**  
"NTR" denotes beams to which Notch Toughness requirements are applicable

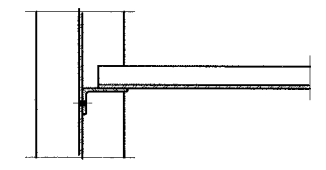
**NOTES:**  
All material shall be AASHTO M270 Grade 50.  
NTR indicates notch toughness requirements.  
See Sheet S-11 for typical beam elevation and framing details.



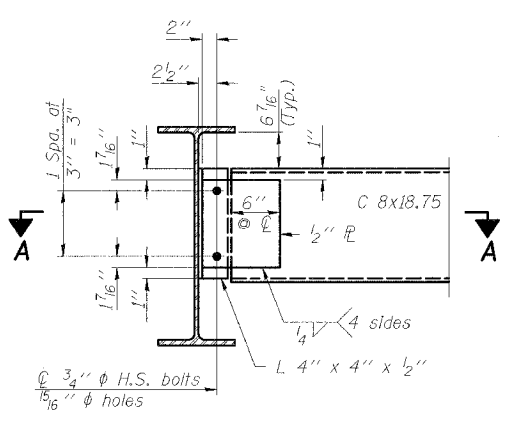
**SECTION A-A**



**SECTION A-A**

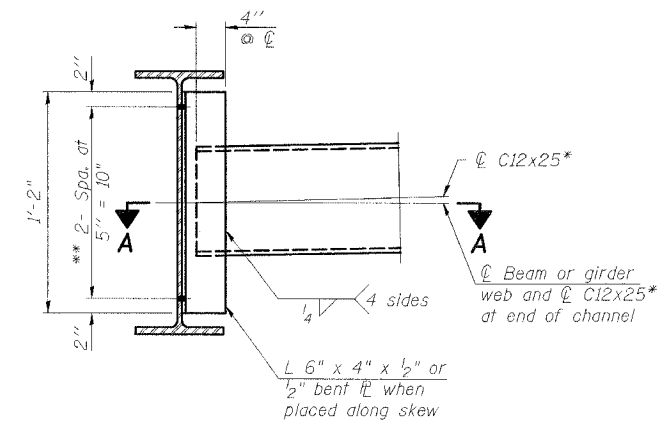


**SECTION A-A**



**END DIAPHRAGM D1**

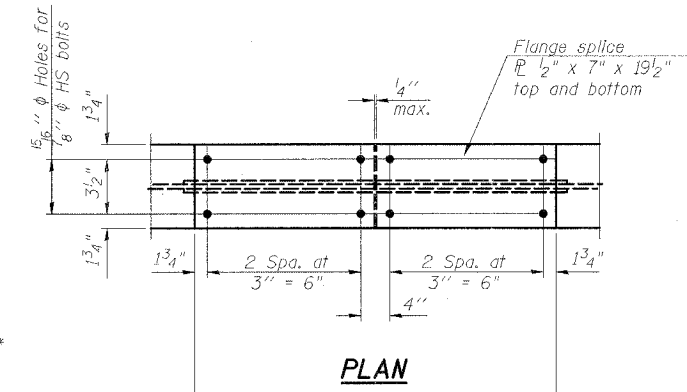
Note:  
Two hardened washers required for each set of oversized holes.



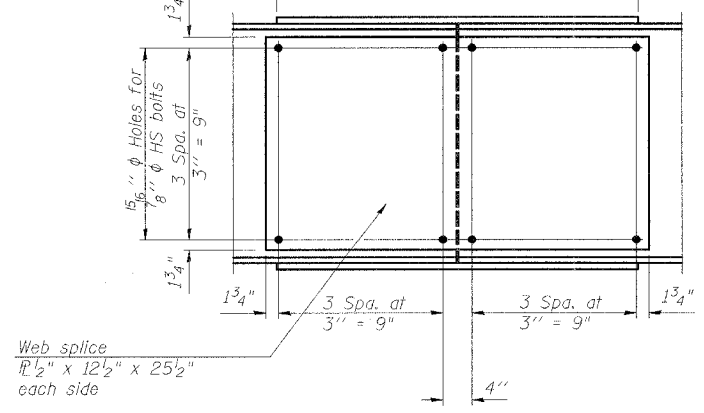
**INTERIOR DIAPHRAGM D2**

Note:  
Two hardened washers required for each set of oversized holes.

\* Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.  
\*\* 3/4" H.S. bolts, 1 5/16" holes

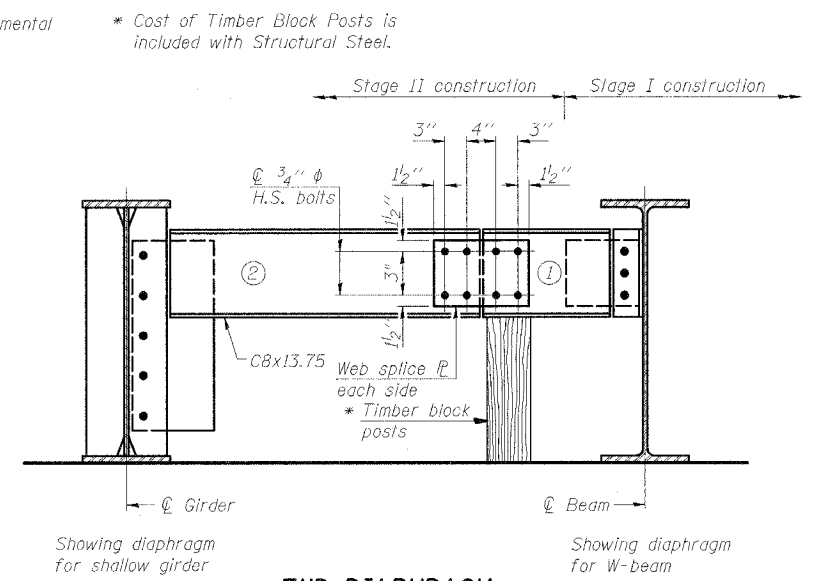


**PLAN**



**ELEVATION**

**SPLICE DETAIL**  
(6 Required)



**END DIAPHRAGM**

**END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE**

- 1.) Order Diaphragm in two sections.
- 2.) Attach section (1) of Diaphragm to Beam
- 3.) Place Timber Block Posts between section (1) of diaphragm and abutment bearing section.
- 4.) Attach section (2) of diaphragm to both Beam and section (1) of diaphragm during Stage II Construction with splice plates.
- 5.) Remove Timber Block Posts.

DESIGNED	KMA
CHECKED	AEU
DRAWN	WJH
CHECKED	RGD

LASALLE COUNTY HIGHWAY DEPARTMENT

BEAM ELEVATION & DETAILS

LASALLE STREET  
OVER SOMONAUK CREEK  
VILLAGE OF SOMONAUK  
SECTION NO. 05-00627-00-BR  
STRUCTURE NO. 050-3057

DATE 11-16-2007

Illinois Professional Design Firm # 184-000108  
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DRAWN BY: WJH  
 CHECKED BY: AEU  
 DESIGNED BY: KMA  
 CLIENT: ILLINOIS HIGHWAY DEPARTMENT  
 PROJECT: LASALLE COUNTY HIGHWAY DEPARTMENT  
 SHEET NO.: S-11